

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Richmond Division

ANTONIE PIERRE GRAY,
Plaintiff

v.

Civil No. 3:22cv679 (MRC)

STATE FARM FIRE AND CASUALTY
COMPANY,
Defendant.

MEMORANDUM OPINION

Antonie Pierre Gray (“Plaintiff”) has filed a Motion *In Limine* to Exclude Defendant’s Expert Witness (the “Motion to Exclude”) (ECF No. 15). In response, State Farm Fire and Casualty Company (“Defendant”) filed a Memorandum in Opposition (ECF No. 17). For the reasons set forth below, the Motion to Exclude (ECF No. 15) will be DENIED.

I. BACKGROUND

A. Factual and Procedural History.

On September 26, 2022, Plaintiff filed an action against Defendant in the City of Richmond Circuit Court, asserting breach of contract. (ECF No. 1-1 at 5). The Complaint alleges that: (1) Plaintiff owned jewelry that had a value of at least \$386,423.00 (the “Jewelry”); (2) Defendant was contractually obligated to indemnify and cover Plaintiff for any loss of or damage to the Jewelry; and (3) on or about May 2, 2022, the Jewelry was accidentally lost while Plaintiff was on a boat (the “Boat”) in the James River. (ECF No. 1-1 at 4).

On October 20, 2022, Defendant removed this matter to federal court based on diversity jurisdiction and the parties consented to proceed before a United States Magistrate Judge. (ECF Nos. 1 at 1 and 6).

B. Mr. Venturella's Proposed Testimony.

Pursuant to Rule 26(a)(2) of the Federal Rules of Civil Procedure, Defendant identified Michael Venturella ("Mr. Venturella") as a potential expert witness at trial. (ECF No. 17-1, at 4). Mr. Venturella is a Naval Architect and Marine Engineer. (ECF No. 17, at 1). Defendant retained Mr. Venturella¹ to evaluate Plaintiff's claims regarding the loss of the Jewelry. (ECF No. 17, at 2-3). Mr. Venturella earned a Bachelor of Science in Mechanical Engineering, and a Master of Science in Ocean Engineering and is a licensed professional engineer in multiple states. (ECF No. 17-1, at 29-34).

According to his expert report (the "Report"), Mr. Venturella intends to opine that: (1) it is improbable that the Boat's motions could have caused the Jewelry to be launched overboard; (2) the wave heights during the alleged loss period were not large enough to crest over the bow of the Boat; and (3) if the transom door was unlatched at the time of the alleged loss, it is improbable that the transom door was in an open position while the Boat was accelerating forward and pitching aft. (ECF No. 17-1, at 9).

Mr. Venturella explains that the Boat's motions "can be divided into three linear components, surge (longitudinal), sway (transverse), and heave (vertical), and three rotational components, roll (rotation about the longitudinal axis), pitch (rotation about the transverse axis), and yaw (rotation about the vertical axis)." (ECF No. 17-1, at 24-25). Mr. Venturella compiled data to determine the Boat's motions and forces acting upon the Boat at the time of the alleged loss. The Report notes that the Boat was inspected on January 27, 2023. (ECF No. 17-1, at 16-20). At that time, several key measurements were taken during

¹ SEA, Ltd (S-E-A) provided engineering review and analysis for this matter. The investigation was assigned to Mr. Venturella. (ECF No. 17-1, at 9).

the inspection. (ECF No. 17-1, at 16-20). The Report references the wind and sea state collected by the National Oceanic and Atmospheric Administration and archived in the National Data Buoy Center at the time of the alleged loss. (ECF No. 17-1, at 21-23).

Mr. Venturella calculates the “accelerations necessary to launch the [Jewelry] over the nearest bulwarks.” (ECF No. 17-1, at 24-25). To perform this calculation, the Report notes “uniform acceleration projectile motion formulas were used.” (ECF No. 17-1, at 24-25). The Report summarizes results of the calculations made to determine what gravitational force equivalent (i.e., g-force)² would be required at various combinations for the Jewelry to be launched forty-five degrees, over the bulwarks. (ECF No. 17-1, at 24-25). Mr. Venturella explains that he relies on various rules and formulas to calculate maximum vertical accelerations impacting the Boat. (ECF No. 17-1, at 24-25). Further, Mr. Venturella notes that he uses the maximum speed of the Boat as the speed for his calculations. (ECF No. 17-1, at 24-25). Under those conditions, Mr. Venturella concludes that the Boat could have experienced forces between 4.6 g and 6.5 g. (ECF No. 17-1, at 26). Mr. Venturella opines greater forces would be necessary to launch the Jewelry at forty five degrees over a bulwark. (ECF No. 17-1, at 26). Therefore, Mr. Venturella concludes that it would be improbable that the Boat’s motions caused the Jewelry to be launched over the side of the Boat.

Importantly, Mr. Venturella confirms that he “considered the weight and dimensions of the [Jewelry]”, however, the weight of the [J]ewelry has no relevance to [his] opinion that the [Boat’s] motions did not cause the [Jewelry] to be launched over the

² G-force, or g’s is the force of gravity or acceleration on a body. G-Force, Merriam-Webster.com <https://www.merriam-webster.com/dictionary/g-force> (last visited May 3, 2023).

side of the [Boat].” (ECF No. 17-2, at 2). In addition, the Report references he reviewed the Jewelry appraisal which includes the weight, length, and width of each item. (ECF No. 17-1 at 11 *citing* 17-4, at 3-11).

The Report also examines the “probability of a sudden turbulent sea state or a wave large enough to come over the bow.” (ECF No. 17-1, at 26). Mr. Venturella uses recorded meteorological data archived by Station WDSV2 Willoughby Degaussing Station. (ECF No. 17-1, at 22). Mr. Venturella describes the pertinent information, including wind direction, speed, and gusts recorded by the buoy on May 2, 2022, between 3:30 p.m. and 7:30 p.m. (ECF No. 17-1, at 22). Mr. Venturella then relies on the nearest buoy with archived wave data. (ECF No. 17-1, at 22-23). Station 44087 – Thimble Shoal, VA, captured the significant wave height³ and average wave period⁴. (ECF No. 17-1, at 23). Considering this information and the specifications of the Boat, Mr. Venturella determines that the wave heights “were not large enough to crest over the bow of the [Boat] in head seas.” (ECF No. 17-1, at 26).

Finally, the Report concludes that if the transom door was unlatched at the time of the alleged loss, it is improbable that the transom door was in an open position while the Boat was accelerating forward and pitching aft. (ECF No. 17-1, at 26). The Report

³ Significant wave height is “approximately equal to the average of the highest one-third of the waves, as measured from the trough to the crest of the waves. How are significant wave height, dominant period, average period, and wave steepness calculated?, National Data Buoy Center, National Oceanic and Atmospheric Administration, <https://www.ndbc.noaa.gov/wavecalc.shtml> (last visited May 3, 2023).

⁴ Average Wave Period is the average of seconds between waves during a 20-minute period. Measurement Descriptions and Units, National Data Buoy Center, National Oceanic and Atmospheric Administration, <https://www.ndbc.noaa.gov/faq/measdes.shtml#apd> (last visited May 3, 2023).

describes the transom door, and its latching mechanisms at the time of the inspection. (ECF No. 17-1, at 26-27). The Report also states that when the Boat accelerates, the forces on the transom door would keep it closed. (ECF No. 17-1, at 26-27). Therefore, Mr. Venturella concludes that it would be unlikely for the unlatched transom door to be open while the “vessel was accelerating forward and pitching aft.” (ECF No. 17-1, at 26-27).

C. The Motion to Exclude.

Plaintiff moves to exclude Mr. Venturella’s expert testimony on two limited grounds. (ECF No. 16, at 4). First, Plaintiff contends that Mr. Venturella’s opinions address facts that are within the jury’s knowledge and experience. (ECF No. 16, at 4). Second, Plaintiff argues that Mr. Venturella’s “opinion that the force created by the waves was not sufficient to propel the [J]ewelry overboard is not reliable as it does not consider the weight of the Jewelry at issue.” (ECF No. 16, at 4). The Motion to Exclude does not: (1) dispute Mr. Venturella’s qualifications as an expert witness; (2) challenge the Report’s compliance with Rule 26(a)(2) and Local Civil Rule 26(D); or (3) dispute that the field of kinematics is accepted by the scientific community.

In response, Defendant contends that: (1) Mr. Venturella’s opinions are not within the jury’s knowledge and experience and would be helpful to a jury; and (2) Mr. Venturella reached his opinions through review of maritime data and engineering calculations. (ECF No. 17, at 11-12).

As previously noted, Mr. Venturella maintains that he “considered the weight and dimensions of the [Jewelry]”, however, “the weight of the [J]ewelry has no relevance to [his] opinion that the [Boat’s] motions did not cause the [Jewelry] to be launched over the side of the [Boat].” (ECF No. 17-2, at 2). As a result, Defendant maintains that the weight

of the Jewelry is irrelevant to Mr. Venturella's determination of whether the Boat's motions could have propelled the Jewelry over the side of the Boat. (ECF No. 17, at 10). Defendant's contention is supported by an affidavit from Mr. Venturella, which provides that:

[his] opinion addresses the kinematics of the [Jewelry] being placed into motion by an initial impulse. In the application of uniform acceleration projectile motion equations, the motion of the projectile is independent of mass, as the projectile is acted only by the downward gravitational acceleration. Kinematic projectile motion calculations have been tested, subjected to peer review and publication in widely used engineering textbooks, and have widespread acceptance within the engineering community.

(ECF No. 17-2, at 2).

Defendant further argues that Plaintiff's objections to Mr. Venturella's calculations do not go to the admissibility of his opinion but to the weight that the opinion should be given as evidence. (ECF No. 17, at 11).

II. STANDARD OF REVIEW

Federal Rule of Evidence 702 ("Rule 702") governs the admissibility of expert testimony. Rule 702 provides that "[a] witness who is qualified as an expert by knowledge, skill, experience, training or education may testify in the form of an opinion or otherwise if" the following conditions are satisfied:

- (a) the expert's scientific, technical, or otherwise specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

Rule 702 thus establishes "a district court's gatekeeping responsibility to 'ensure that an

expert's testimony both rests on a *reliable* foundation and is *relevant* to the task at hand.” *Nease v. Ford Motor Company*, 848 F.3d 219, 229 (4th Cir. 2017) (quoting *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 597 (1993)). In undertaking this gatekeeping function, the court enjoys “broad latitude” to consider whatever factors prove applicable given “the unique circumstances of the expert testimony involved.” *Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 261 (4th Cir. 1999). The Rule 702 inquiry necessarily proves “flexible,” focusing on the expert’s “principles and methodology” rather than the conclusions that he draws. *Id.*

“A reliable expert opinion must be based on scientific, technical, or other specialized *knowledge* and not on belief or speculation.” *Oglesby v. Gen. Motors Corp.*, 190 F.3d 244, 250 (4th Cir. 1999). Courts look to several factors as indicia of reliability, including “testing, peer review, evaluation of rates of error, and general acceptability” in the expert’s field. *Id.*

Regarding relevance, the Court must ask “whether [the] expert testimony proffered . . . is sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute.” *Daubert*, 509 U.S. at 591. The relevance inquiry is one of “fit” — expert testimony must demonstrate “a valid . . . connection to the pertinent inquiry as a precondition” of admissibility. *Id.* at 592.

Throughout its Rule 702 analysis, a court must remain cognizant of two bedrock, yet competing principles. On the one hand, Rule 702 “was intended to liberalize the introduction of relevant expert evidence.” *Westberry*, 178 F.3d at 261. Courts therefore “need not determine that the expert testimony a litigant seeks to offer into evidence is irrefutable or certainly correct.” *Id.* On the other hand, expert testimony often proves uniquely capable of confusing or misleading the jury. *Id.* “Proffered evidence that has a greater potential to mislead than to enlighten” should therefore be excluded. *Id.* Critically, the proponent of expert testimony bears the burden of

establishing its admissibility by a preponderance of the evidence. *Cooper v. Smith & Nephew, Inc.*, 259 F.3d 194, 199 (4th Cir. 2001) (citing *Daubert*, 509 U.S. at 592 n. 10).

III. ANALYSIS

The Motion to Exclude will be DENIED. This Court concludes that Mr. Venturella's opinions address issues that are not within the jury's knowledge and experience. Further, Mr. Venturella has provided a sworn statement confirming that he considered the weight of the Jewelry, but he clarified that the weight of the Jewelry is irrelevant to his opinion regarding whether the Boat's motions could have propelled the Jewelry overboard. The concerns raised with Mr. Venturella's opinions, including, but not limited to his consideration of the weight of the Jewelry in his calculations, can be addressed by Plaintiff on cross-examination.

A. Mr. Venturella's Opinions Address Issues That Are Not Within the Jury's Knowledge and Experience.

Mr. Venturella's opinions are presumed helpful unless they pertain to information that is in the everyday knowledge of a lay juror. *Persinger v. Norfolk & Western Railway Co.*, 920 F.2d 1185, 1188 (4th Cir. 1990). Plaintiff argues that the opinions should be excluded because they address issues that are within the jury's knowledge and experience. (ECF No. 16, at 4).

Rule 702 permits the exclusion of expert testimony if the Court determines that the expert's scientific, technical, or otherwise specialized knowledge would not help the trier of fact to understand the evidence or to determine a fact in issue. *See Persinger*, 902 F.2d 1188 (exclusion of an expert was not an abuse of discretion because the opinion dealt with a matter (i.e., the amount of weight that is safe to lift) which was within the common knowledge of jurors); *see also Peters v. Five Star Marine Service*, 898 F.2d 448, 450 (5th Cir. 1990) (expert testimony was unnecessary because jury could adeptly assess whether cargo rolling around the deck of a supply boat had been improperly stowed); *Collins v. Cash Am. E. Inc.*, Civil Action No. 2:20-cv-2989-RMG, 2021 U.S.

Dist. LEXIS 231841, at *6 (D.S.C. Dec. 2, 2021) (the jury does not need an expert to opine on the proper method to set up or secure a tent).

However, Mr. Venturella's opinions: (1) analyze meteorological data from buoys; (2) explain the forces exerted on the Boat and the impact on the Boat's contents; and (3) apply that information to the facts of this case. The Court concludes that these technical issues are not within the everyday knowledge and experience of a lay juror.

A careful review of the Report confirms that Mr. Venturella's opinions do not simply state the obvious when they are stripped of their technical gloss. Instead, Mr. Venturella's opinions touch on technical matters such as the Boat's motions, projectile motions (i.e., kinematics), wave motion, planning hull trim, hydrodynamic lift, and the design and operation of the Boat, including the rear transom door.

Therefore, the Court finds Mr. Venturella's opinions: (1) are not within the jury's knowledge and experience; and (2) would be helpful to the jury.

B. Mr. Venturella Considered the Weight of the Jewelry. However, He Determined That the Weight of the Jewelry is Irrelevant to His Opinion Regarding Whether the Boat's Motions Could Have Propelled the Jewelry Overboard.

Plaintiff argues that Mr. Venturella's failure to factor in the weight of the Jewelry in his calculations of the force required to launch the Jewelry off the Boat made his opinion unreliable. (ECF No. 17, at 4). Defendant asserts that the supposed failure to consider the weight of the Jewelry in the calculations goes to the weight of the evidence, not its admissibility. (ECF No. 17, at 11).

The relevance and reliability of expert testimony is examined by consideration of, among other things: (1) whether the particular scientific theory "can be (and has been) tested"; (2) whether the theory "has been subjected to peer review and publication"; (3) the "known or potential rate of

error”; (4) the “existence and maintenance of standards controlling the technique’s operation”; and (5) whether the technique has achieved “general acceptance” in the relevant scientific or expert community. *United States v. Crisp*, 324 F.3d 261, 266 (4th Cir. 2003) (quoting *Daubert*, 509 U.S. at 593-94); *see also Tassin v. Sears Roebuck*, 946 F.Supp. 1241, 1248 (M.D. La. 1996) (design engineer’s testimony can be admissible when the expert’s opinions “are based on facts, a reasonable investigation, and traditional technical/mechanical expertise, and he provides a reasonable link between the information and procedures he uses and the conclusions he reaches”).

Plaintiff does not dispute that the field of kinematics is accepted by the scientific community. Mr. Venturella notes that “[k]inematic projectile motion calculations have been tested, subjected to peer review and publication in widely used engineering textbooks, and have widespread acceptance within the engineering community.” (ECF No. 17-2, at 2).

In addition, Plaintiff’s contention that Mr. Venturella did not consider the weight of the Jewelry is belied by Mr. Venturella’s sworn declaration that he “considered the weight and dimensions of the [Jewelry],” however “the weight of the [J]ewelry has no relevance to [his] opinion that [the Boat’s] motions did not cause the [Jewelry] to be launched over the side of the [Boat].” (ECF No. 17-2, at 2). Mr. Venturella explains that the weight of the Jewelry is irrelevant to his opinion because “[i]n the application of uniform acceleration projectile motion equations, the motion of the projectile is independent of mass, as the projectile is acted only by the downward gravitational acceleration.” (ECF No. 17-2, at 2).

Plaintiff offers no argument to explain why the weight of the Jewelry is relevant to Mr. Venturella’s calculations and overall opinion. Plaintiff does not appear to challenge Mr. Venturella’s reliance on various rules or formulas to calculate maximum vertical accelerations or his use of the maximum speed of the of the Boat as the speed for his calculations. Instead, Plaintiff

simply submits the conclusory statement that Mr. Venturella's opinion "is not reliable because it does not consider the weight of the [J]ewelry at issue." (ECF No. 16, at 4). Plaintiff fails to state how the lack of consideration of the weight of the Jewelry runs afoul of the standard principles of kinematics.

The Court concludes that: (1) Mr. Venturella's opinions appear to be based on facts, a reasonable investigation, and traditional technical/mechanical expertise; (2) Mr. Venturella provides a reasonable link between the information and procedures he uses and the conclusions he reaches; and (3) Plaintiff's argument is not sufficiently developed to exclude Mr. Venturella's opinions at this time. As a result, any concerns raised regarding Mr. Venturella's opinions, including, but limited to his consideration of the weight of the Jewelry in his calculations, must be addressed by Plaintiff at the trial of this matter.

C. All Determinations of Credibility are Reserved for the Jury.

In the Motion to Exclude, Plaintiff raises concerns that Mr. Venturella's proposed testimony may touch on Plaintiff's credibility which "would invade the province of the jury." (ECF No. 16, at 4). The Court notes that at various times, Mr. Venturella suggests that there were "inconsistencies" in Plaintiff's description of the events. (ECF No. 17-1, at 14; ECF No. 17-3, at 9, 18). Despite these statements, Mr. Venturella maintains that he has "not offered an opinion regarding Plaintiff's credibility." (ECF No. 17-2, at 3).

While Mr. Venturella will be permitted to offer his opinions at the trial of this matter, his testimony shall not directly or indirectly reference Plaintiff's credibility and/or the consistency of Plaintiff's descriptions of the events that is the subject matter of this contractual dispute. At trial, determinations regarding the reliability and credibility of any witness fall squarely and solely

within the province of the jury. *O'Neill v. CP Crystal City, LLC*, No. 1:12-cv-868, 2013 WL 12141426, at *2 (E.D. Va. Mar. 27, 2013) (Trenga, J.).

IV. CONCLUSION

For the reasons set forth above, the Motion to Exclude (ECF No. 15) will be DENIED. Let the Clerk file a copy of this Memorandum Opinion electronically and notify all counsel of record.

Richmond, Virginia
Dated: May 4, 2023

/s/ 
Mark R. Colombell
United States Magistrate Judge